

OLDEST BEE PAPER
IN AMERICA

THE AMERICAN BEE JOURNAL

ESTABLISHED
IN 1861

DEVOTED TO SCIENTIFIC BEE-CULTURE AND THE PRODUCTION AND SALE OF PURE HONEY.

VOL. XVII.

CHICAGO, ILL., AUGUST 24, 1881.

No. 34.

THE AMERICAN
BEE JOURNAL

Published every Wednesday, by

THOMAS G. NEWMAN,
EDITOR AND PROPRIETOR,
974 WEST MADISON ST., CHICAGO, ILL.

TERMS OF SUBSCRIPTION:

WEEKLY—(52 numbers) \$2 a year, in advance.
Three or Six Months at the same rate.
SEMI-MONTHLY—The first and third numbers of
each month, at \$1.00 a year, in advance.
MONTHLY—The first number of each month, at
50 cents a year, in advance.

Any person sending a club of six is entitled
to an extra copy (like the club) sent to any address
desired. Sample copies furnished free.

Remit by money-order, registered letter, ex-
press or bank draft on Chicago or New York, pay-
able to our order. Such only are at our risk. Checks
on local banks cost us 25 cents for collecting.

Free of postage in the United States or Canada.
Postage to Europe 50 cents extra.

Entered at Chicago post office as second class matter.



What and How to Plant for Honey.

A correspondent asks the following questions:

I want to plant extensively of honey-making plants, but I need some information. Could you not give information through the columns of your paper on the cultivation of the different grasses, the latitude to which they are adapted, soil required, etc.; it would be valuable to many in these regions; state how they will do in orchards, woodland, pastures, or meadows, on drained lands, etc. I want to purchase seeds next fall, but I am much in need of information, and hope you will give it to me. P. M. Poplar Grove, Ark., Aug. 8, 1881.

As bee-keeping has heretofore been conducted in this country, the expansion of civilization has every year curtailed its reliability. As forests have trembled and fallen, under the sturdy blows of the woodman's axe, so have the facilities for early and vigorous spring breeding been lessened, and the probability of a lighter yield of linden honey been rendered more certain; as the green, flower-bedecked prairies and woodland openings have been transformed into fields of golden grain, so have been added to the certainty of a light honey crop; every marsh and waste-place reclaimed, has wrenched its tribute from the sweet store of the toiling bee; scientific agriculture has made bee-keeping, year by year, a more precarious occupation, and confirmed many apiarists in the

opinion that bee-keeping "does not pay." Nor would stock-raising be remunerative, if the cattle were deprived of their grazing land; sheep-rearing would be unprofitable, if they were robbed of their pastures; and even market-gardening would cease to give satisfactory returns, if the specialist were to neglect stimulating the soil from which to obtain his bountiful returns.

Of course, with the natural and artificial increase of bees, and the civilizing destruction of nature's spontaneous flora, bee-keeping has become yearly more precarious, and we quite frequently hear inquiries for good locations for apiaries, and complaints of over-stocking. To be sure, white clover accompanies cultivation, and we can never weary in admiring its beauty and excellence, but this season has demonstrated, as have many others, that we cannot depend upon one source alone for satisfactory profits. Never was it more abundant, over so wide a range of territory, as it has been this season, but a few days of cold rains here, or bees too light to gather it there, or continuous adverse winds somewhere else, have changed many bright dreams to sad realities. With a general heavy bloom, but little honey has been obtained from linden.

We cannot understand how any one can mistake his duty to provide pasturage, if profits are expected; nor how a humane, generous-hearted bee-keeper, can increase his numbers of bees without making some provision against starving. No person can view our streets lined with sweet clover, or listen to the busy music of the many bees amongst its sweet-scented foliage, without being convinced that it will not only pay to plant for honey, but that every dollar expended for sweet clover seed will be repaid by the bees with compound interest. For several seasons we have eagerly and selfishly observed this plant, and are persuaded that as a supplemental honey plant, everything considered, it has no superior, if an equal, in America. Now that honey is a staple article of export, and prices are rapidly becoming staple, this plant will, more than any other, make it a staple crop. Give it a liberal trial.

But many are not convinced (and do not wish to be) that honey alone will amply repay for special planting. To such we recommend any of the clovers, especially white and alsike. They are both excellent for grazing, and the latter desirable for hay. Alfalfa is also highly recommended.

We are often asked to give the name of some annual that we can recommend as an excellent honey producer, of sufficient hardiness to withstand excessive rain and drouth, and which will thrive in fence corners and out-of-the-way places without special cultivation.

After several years of close, careful observation, we are more than confirmed in the good opinion we formed and expressed two years ago regarding the good qualities of *Reseda grandiflora*



Reseda Grandiflora.

(mammoth mignonette), as an excellent honey plant. It is a plant of vigorous, rapid growth; having a strong, deep-penetrating tap-root, it is very tenacious in its hold upon the soil, and will grow, and bloom, and yield a rich return of beautiful nectar under the most adverse circumstances; with a sharp, pungent taste, not unlike horse-radish, the foliage is not a favorite resort for spiders or insects. Before white clover has fairly passed its maximum of excellence, the graceful and modest blossoms of the mignonette will have won the preference of the discriminating bees. The flowers are thickly studded on the points of curving racemes, and as the base matures its many pods well filled with diminutive black seeds, the point is daily presenting a succession of fresh bloom, which continues until winter has fairly set in, thus providing each fair day a nectar flow, despite the drenching rains which may precede.

It is not unusual to see racemes 3 ft. or more in length. The roots, in taste, are a counterpart of horse-radish. The foliage is not at all similar to *Re-*

seda odorata, and is said to be an excellent table salad. We hope every bee-keeper will give it a fair trial. Plant early in the spring.

Sweet clover is said to make an excellent dressing for the soil, some asserting its superiority to red clover, and when stock are educated to it as a forage they eat it quite as readily, and thrive upon it.

If honey is the principal desideratum in planting, then harrow in sweet clover this fall, and as you will derive but little if any honey from it next season, in early spring harrow in some mammoth mignonette on the same soil, which will commence blooming in June, and astonish you with the excellence of its honey.

The latter, like sweet clover, will thrive upon and yield a rich return from any soil, wherever it can have a half a chance.

But do plant something—anything; if your bees cannot have the first and long-continued harvest from sweet clover, they will thank you for gleanings from the cattle and sheep pastures, and without murmuring eke out a bare existence on the proscribed thistles and burdocks, until nature, unmolested by man, bedecks herself in her autumn robe of flowers.

It will be seen, by reference to the Local Convention Directory, that the time of meeting of the Eastern N. Y. Bee-Keepers' Union, has been changed from Nov. 29, to Sept. 27.

Local Fairs.—Bee-keepers attending fairs this fall should have a few bee-keepers' manuals, etc., with their exhibits. When taken in ½ dozen lots by express, for this purpose, we will supply any or all kinds, or one or two of each to make the half dozen, at 30 per cent. discount. If wanted by mail, add the postage. We do not send any "on sale or return." We will furnish copies of the BEE JOURNAL free for distribution at fairs.

An error occurred on page 250 of the BEE JOURNAL for Aug. 10. In referring to Rocky Mountain bee plant we inadvertently stated that it was a biennial; it should read "annual."

Mr. G. M. Doolittle, in a private note, remarks as follows: "My report of this year's honey crop will be favorable, notwithstanding poor white clover and basswood harvests, as well as sickness in my family and being over-worked myself."

Michigan Adulteration Law.

The following is the full text of a bill just passed by the Michigan Legislature "to prevent and punish the adulteration of articles of food, drink and medicine, and the sale thereof when adulterated:"

Section 1. *The people of the State of Michigan enact*, That no person shall mix, color, stain or powder any article of food with an ingredient or material so as to render the article injurious to health, with the intent that the same may be sold; and no person shall sell or offer for sale any such article so mixed, colored, stained or powdered.

Sec. 2. No person shall, except for the purpose of compounding in the necessary preparation of medicine, mix, color, stain or powder, or order or permit any other person to mix, color, stain or powder any drug or medicine with any ingredients or materials so as to affect injuriously the quality or potency of such drug or medicine, with intent to sell the same, or shall sell or offer for sale any such drug or medicine so mixed, colored, stained or powdered.

Sec. 3. No person shall mix, color, stain or powder any article of food, drink or medicine, or any article which enters into the composition of food, drink or medicine, with any other ingredient or material, whether injurious to health or not, for the purpose of gain or profit, or sell or offer the same for sale, or order or permit any other person to sell or offer for sale any article so mixed, colored, stained and powdered, unless the same be so manufactured, used or sold, or offered for sale under its true and appropriate name, and notice that the same is mixed or impure is marked, printed or stamped upon each package, roll, parcel or vessel containing the same, so as to be and remain at all times readily visible, or unless the person purchasing the same is fully informed by the seller of the true name and ingredients (if other than such as are known by the common name thereof) of such article of food, drink or medicine at the time of making sale thereof or offering to sell the same.

Sec. 4. No person shall mix any glucose or grape sugar with syrup or sugar intended for human food, or any oleomargarine, suine, beef fat, lard, or any other foreign substance, with any butter or cheese intended for human food, or shall mix or mingle any glucose or grape sugar or oleomargarine with any article of food, without distinctly marking, stamping or labeling the article, or the package containing the same, with the true and appropriate name of such article, and the percentage in which glucose or grape sugar, oleomargarine or suine, enter into its composition; nor shall any person sell or offer for sale, or order, or permit to be sold, or offer for sale, any such [article] of food into the composition of which glucose, or grape sugar, or oleomargarine, or suine has entered, without at the same time informing the buyer of the fact, and the proportions in which such glucose or grape sugar, oleomargarine or suine, has entered into its composition.

Sec. 5. Any person convicted of violating any provision of any of the foregoing sections of this act shall for the first offense be fined not less than ten dollars nor more than fifty dollars. For the second offense they shall be fined not less than twenty-five dollars nor more than one hundred dollars, or confined in the county jail not less than one month nor more than six months, or both, at the discretion of the court; and for the third and all subsequent offenses they shall be fined not less than two hundred and not more than one thousand dollars, and imprisonment in the State prison not less than one year nor more than five years.

Sec. 6. No person shall be convicted under any of the foregoing sections of this act if they can show to the satisfaction of the court or jury that he

did not know that he was violating any of the provisions of this act, and that he could not with reasonable diligence have obtained that knowledge.

Sec. 7. One-half of all fines collected under the provisions of this act shall belong and be paid to the person making the complaint, and the remainder shall belong and be paid into the school fund of the township, city or village where such conviction is had.

Sec. 8. The prosecuting attorneys of the counties of this State are charged with the enforcement of this act, and it is hereby made their [duty] to appear for the people and to attend to the prosecution of all complaints under this act in all the courts in their respective counties.

Sec. 9. All acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

The National Convention.

We learn, with pleasure, that Rev. L. L. Langstroth will (his health permitting) be in attendance at the National Convention in Lexington, Oct. 5-7, 1881. He will be the guest of Mr. Wm. Williamson and family. The presence of this good man and illustrious bee-master, cannot fail to be a very attractive feature in the proceedings of the National organization. The programme, published in our issue of the 17th inst., presents a variety so so extensive and tempting, that pressing duties at home alone can prevent a large and enthusiastic attendance. Many points of general interest will be discussed, some or all of which will have a bearing on the future of bee-keeping, and no reflecting apiarist can for a moment imagine that he is not personally interested in these discussions. All should make a strenuous effort to be present, and our word for it, no Northern bee-keeper will regret having enjoyed a few very pleasant and profitable holidays with our Southern friends in their "Old Kentucky Home."

Honey Trowel.—Mr. J. M. Shuck has sent us an implement for inspection and trial, for uncapping honey. We have not had opportunity to test it yet. The following is a copy of his letter accompanying it:

I send you a honey trowel. I have been enjoying my first experience in extracting honey, and the first thing I did was to quarrel with the uncapping tools, called honey knives. I went to a seed store and purchased, for 30 cents, a gardener's trowel, which I sharpened, and then tried again, and I was pleased. To operate, lay the comb flat down, or set it on edge, as desired; if the operator is right handed, work from right to left, if left handed, from left to right; the tool will cut like a razor, and the caps will roll up beautifully. The one I send will hold the caps of one side of a Langstroth frame without emptying. If, after trial, you find it of interest to bee-keepers, you may notice it as you think it deserves; I have none for sale.

Des Moines, Iowa, Aug. 3, 1881.

We invite special attention to our Market Reports this week. We give reports from several more of the chief American marts. Selling honey to the best advantage is of considerable importance now, and we have, therefore, made arrangements for weekly reports from the cities named, as well as some others not yet indicated. This will give producers an opportunity to select the best market, considering price and convenience.



MISCELLANEOUS.

Bee-Keeping in Southern California.

—The extent to which bee-keeping prevails in the foot-hills of Southern California may be estimated by the following item from an exchange:

The San Francisco *Examiner* places the number of hives worked this season in the counties of Los Angeles, San Diego and San Bernardino at nearly 200,000. There are, according to this authority, at least 600 men wholly engaged in the honey business this season, and an average crop is assured.

Wooden Foundation.—The London Journal of Horticulture says:

Everyone who has any thing to do, even the slightest, with scientific bee-keeping must be convinced of the value to bees and bee-masters of comb foundation. Personally I am disposed to endorse Messrs. Abbott's view that now comb foundation is so good, so strong and perfect, and at the same time so moderate in price, it is doubtful whether true economy is not best shown by not using combs a second time. There is something about the foundation that the bees appear to like, and they exclaim like the guest at the feast, whose silence obtained for him the character of being exceedingly clever till the apple dumplings were too much for his gravity, and he burst out with, "Them be the jockeys for me!" It appears to me that the bees express similar sentiments. I placed a frame with some comb in one hive, and in another with an inch of foundation in two pieces (part yellow, part white). In 24 hours I removed both; the comb appeared scarcely touched by the bees, but the foundation was built on "all along the line;" and, what very much surprised me the bees had built up yellow cells on yellow foundation and white on the white! How could they tell the difference and manage this? It seems to me that the midrib is the difficult point of manufacture to our industrious little workers, but when this is provided they lay on the cells at an express rate.

I have seen wooden foundation vaunted as preventing sagging, and being stronger &c. Accordingly I invested in some and tried 6 frames. It appeared a first rate article, and when fitted to the frames the latter were certainly as strong as possible. I expected grand success. Great, however, was my dismay on the first time of opening (they were in different hives) to find the first pair that happened to be next each other glued together, the comb being built irregularly and attached to both wood foundations. The bars could not be removed without a rupture and the falling of a large piece of comb. Then I found much uncovered—in fact, if the wax had been at all interfered with, here the bees had left it bare, but then to make amends, and determined, as is their wont, to economize space, they had built out the next comb to fill up the space—a great evil, as the comb becomes so heavy that in hot weather it breaks off, and sad havoc and loss ensue. Still more surprising, I found that though the wax was worker cells on the wooden foundation, they disregarded it and built drone comb over, and on the irregular built cells they set to and built out some pieces of perfect two-sided comb with central portion and cells, both sides sealed completely on one side of the wood; in fact it seems to me that they were tempted by it to all sorts of vagaries. Of the 12 faces on these 6 sheets, I have only seen one at all even and respectable, and this was not built over all the face; in fact, the bees evidently do not like some portions of it. I cannot recommend it, and, with the present beau-

tiful wax foundation, for several purposes it appears unnecessary. Lastly, it seems to me to yield its contents to the extractor with difficulty.

A large Canadian Apiary.—It will be remembered that Dr. Nugent purchased several hundred colonies of bees of Mr. Heddon last season, and many would like to know how he is succeeding with his new apiary in Canada. From the *Strathroy Age* we copy the following particulars:

We are pleased to learn that our friend, Dr. Nugent, is reaping the reward his energy and enterprise so well entitles him to do. The Dr. invested upwards of a thousand dollars in bees at one purchase last fall, and we doubt not that his investment will prove a profitable one. We know him to be an enthusiastic and intelligent apiarist, and we expect soon to see his apiary take its place among the largest and best managed establishments of this kind in this continent.

Some days ago we greatly enjoyed a visit to "Linden Apiary," where we found the proprietor, Dr. Nugent, actively engaged gathering in the honey harvest. The Dr. and his manager, Mr. Conklin, showed us over the entire grounds, and demonstrated some of the minutiae of bee-keeping. There are near 400 colonies now in the apiary, most of them are Cyprian, Italian and Holy Land bees, some few German or common black ones, which are rapidly being replaced by the three first. This is done by destroying all the queens belonging to such stocks and giving them the desired pure ones, thus in a few weeks rendering the entire colonies so acted upon pure. Some few blacks will still be kept, such as have proved themselves extraordinary good workers.

We have had a sample of the section honey sent to our office, and for virgin whiteness, as well as for neatness of style and flavor, it cannot be surpassed, if even equalled.

The total yield this year is about 15,000 lbs., though it is expected when setting up the bees for winter 1,000 or 2,000 pounds more will be received.

The doctor intends establishing another yard next spring within a short distance of the town, and at present thinks of locating it above the town on the banks of the Sydenham.

Honey Dew.—An exchange contains the following story concerning the appearance of honey dew in Georgia:

My daughter was engaged early Sunday morning in sweeping off the front porch, when her attention was attracted by the plaintive cries of young chickens and the distressed clucking of a hen. The sound came from a pile of leaves under some poplar trees in the yard, and hurrying to the spot she found the little chicks all stuck up with leaves, rolling about struggling to free themselves, and two of the little sufferers were stuck together. She picked these two up, and coming to the house called me. On examination we found them covered with a sticky substance, which seemed to have come off the leaves. I went into the yard, and found it on all the leaves, and, tasting, was surprised to find it honey. Looking around I could see it glistening in the sunshine like diamonds on every leaflet, and on the porch for 2 or 3 feet were splashes of it. Several neighbors dropped in during the day whom I told of the honey shower, supposing it had been general, but they were incredulous till shown evidences of it. In the evening of the same day I noticed a mist between me and the sun, and a closer examination disclosed the fact that we were having a repetition of the phenomenon, which was witnessed by many people. While it did not run off the house, either morning or evening, it covered the leaves of the trees and shrubs, and was, without a doubt, honey dew, and that, too, from a cloudless sky.

Talbot, Ga.

JOHN KEE.

CORRESPONDENCE

For the American Bee Journal.

My Prize Poem on the Honey Bee.

WM. F. CLARKE.

In the brief sketch of my apicultural career which appears in the BEE JOURNAL of July 13, accompanying the portrait, no mention is made of what I have ever regarded as one of the highest honors gained by me as a bee-keeper. Ten years ago this summer I succeeded in winning the \$40 prize, offered by H. A. King & Co., of the Bee-Keepers' Magazine, New York, for the best poem on "The Bee." I was very proud of the achievement, and am yet. Up to that period of my life I had not considered myself, nor been considered by others, a poet. I had, like most people who handle the pen much, now and then jingled a few rhymes together—that was all. When I saw the advertisement offering the prize, I said to myself, "Now, this thing won't go altogether by poetic merit. There must be knowledge of apiculture displayed, as well as poetic genius. I think I know the bee pretty thoroughly, and I am going to try for this prize." On announcing this determination to my better-half, she threw several pails of cold water on it. "The Yankees will never let that prize go to a Canuck; 'You're not a poet, you know,'" etc. Time and trouble thrown away," etc. The true use of advice is to make us more firm in our own way, so I went ahead with my poem, resolved to do my very best.

When the letter came from New York, announcing my success over 40 odd competitors, I felt greatly uplifted, but tried, of course, to seem very meek. I handed the letter to my wife, and retired quietly from the room, so as not to be betrayed into any self-glorifying behavior. That night, without any mention of the New York letter, the subject of the curtain lecture was the duty of not being exalted above measure in view of any honor or distinction that might befall us. Next morning, at the breakfast table (all our children were at home then—now 6 out of 8 have gone from us) the lady of the house made a little speech on this wise: "Children, it is now definitely settled that your papa is a poet. This explains a great many things I never could understand, but I shall henceforth ascribe to the eccentricities of genius." That plea has come in very opportunely many times since; in fact, between "the license of poetry" and the "eccentricities of genius," I get the liberty of doing pretty much as I like.

The poem in question has never appeared in the BEE JOURNAL, I believe. Several of my friends have inquired for copies of it of late, and as it may be said to be "out of print," it might gratify others, as well as myself, to see it in our favorite old apicultural JOURNAL.

PRIZE POEM ON "THE BEE."

Where in the realm of nature do we see
A worthier study than the honey bee?
What curious instinct dictates every art
Whereby this little creature acts its part!
How do the marvels of the hive combine
All other insect wonders to outshine!

A swift-winged forager, the bee sets forth,
Scouting from east to west, from south to north,
Intent on gathering, with industrious haste,
Sweetness that else upon the earth would waste;
And, whereso'er the wanderer may roam,
Laden she flies unerring to her home.

A skilful manufacturer, she makes,
By some internal process, pearly wax,
A substance plastic, soft and delicate,
Beyond the power of man to imitate—
Suited to house the growing insect brood,
Or to encase the store of luscious food.

The bee is mathematical, and well
Illustrates Euclid in her form of cell;
Sir Isaac Newton, Simpson, or Legendre,
To none of these great masters need we send her:
For she has found what they could never see,
A "royal highway" to geometry.

The bee's a warrior bold, and never saw
Foe who could make her from the field withdraw;
In single combat, or in army fight,
No bee has ever shown the feather white—
"Ready, aye ready," any time to rally,
And at a moment's notice forth to sally,

The bee's a model citizen—ease, food,
Life, all is yielded to the public good;
No individual interests weigh a grain
Where there are public interests to maintain;
As in old Rome, when all were for the State,
Rich helped the poor, and poor men loved the great.

The bee, in ages past, was little known
In characters of worker, queen and drone;
Absurd theories and superstitions
Usurped the place of rational positions,
And, while a dozen bees remained alive,
No man durst search the mysteries of the hive.

Each autumn, when the tempting store of honey
Excited appetite or love of money,
The faithful workers forfeited their lives,
That man might get the contents of the hive;
A tragic finish to the busy season,
For which necessity was made the reason.

Now, thanks to science and its hand-maid, art,
The apiculturist acts a wiser part.
The comb is built upon the movable frame,
With smoke or sweet the fiery bees we tame,
Control the busy inmates of the hive,
Obtain their stores, yet save them all alive.

The brisk Italian now assumes the place
Of the familiar, black, old-fashioned race—
Nimble, more energetic, more prolific,
And, happily, in temper more pacific;
A more untiring and adventurous rover,
And able to suck honey from red clover.

Of old a super-glass, or honey-box,
Was placed above each of the thriffter stocks,
In hope they might be tempted there to store
A surplusage of twenty pounds or more
Of first-class honey; but a lay fit
Would oftentimes prevent their doing it.

Now in these palmy days of honey-slugging,
The bees are kept without cessation bringing
New stores of sweet, which quickly we transfer
Into the mel-extracting cylinder.
And thence by use of force centrifugal,
Get honey by the pail or barrel full.

The march of progress is not over yet,
Nor will be till our apiarists get
A plan for making artificial combs,
And thus provide the bee a finished home,
To which all hands shall busily fetch honey,
And smiling bee-men turn it into money.

Next we will find a bee like the Egyptian
For storing honey, but of a description
Quite opposite in temper, and without
That ugly inclination to dart out
The venomous sting, on slightest provocation.
Nature's worst form, or counter-irritation.

With all facilities for honey getting
A race of bees that will admit of setting;
Each household of an apiary possessed,
Bee-keeping followed with unflagging zest,
Honey and milk shall flow all countries through,
And "home, sweet home," obtain a meaning new.

"License of poetry" claimed here. The writer
has never been able to satisfy himself that the
Italian bee gathers from red clover to any extent,
but it is often asserted as a fact, and clover was
wanted here as a rhyme to "rover."

"Comb foundation has come into use since the
poem was written."

Western Stock Journal.

Seasonable Hints—Summer.

O. CLUTE.

The first part of the month of August is, in many places, a season of enforced idleness among bees. The summer flowers are past, and the fall flowers are not in bloom, hence there is little honey to be gathered. Wherever corn is largely cultivated the little fellows will carry a great abundance of pollen into the hives to help the brood-rearing of late fall and early spring when no pollen is to be had.

As soon as the surplus honey-boxes, or sections, or frames, are full and sealed, they should be removed from the hives. Indeed it is usually best to remove the surplus receptacles as honey-gathering ceases, even if they are not full. Bees are apt to carry some of it below, and they soil it by traveling over it.

At this time great care must be exercised, when working among bees, not to incite them to robbing. If honey is left exposed they will at once begin upon it, and soon the whole apiary will be in a high state of excitement. As soon as the supply which has roused them is exhausted they will begin on the weak colonies, master them, and clean them out completely. A little carelessness in exposing honey will thus often be the cause of losing several colonies.

If bees once get to robbing they can be dispersed for the moment by sprinkling the hives that are being robbed with water from a common watering-pot. The bees seem to think it is raining, and so the robbers rush off home. A good means of stopping robbing is to pull several handfuls of weeds and grass and leaves and throw them loosely over the entrance of the hive that is being robbed. Bees belonging to the hive will make their way out and in through this obstruction. But robbers seem to be chary about going through it. Probably the best means of stopping robbing is to spread a sheet over the hive that is being robbed, letting it completely cover the hive, and

come down to the ground all around. This, of course, pre-supposes that the hives are set near the ground, as all hives should be. Four or five inches above the surface is plenty.

As soon as the honey ceases coming into the hive the queen relaxes her efforts in laying. Instead of depositing 2,000 or 3,000 eggs a day, she will, perhaps, lay only a few hundred. This, of course, makes the growing brood so much less, and hence there will be fewer bees to gather the fall harvest than there would be if the queens would lay every day all the eggs possible for them to lay. In order to promote laying some bee-keepers are accustomed to feed each hive about a quarter of a pound of thin sugar syrup every day from the time honey-gathering ceases until it begins again. This feeding needs to be done with great caution, in order not to incite robbing.

As soon as the fall flowers begin to yield honey, see to it that the surplus honey receptacles are all in place. Prevent swarming if possible. The parent hive is weakened, and the new one does not gather enough to last it over winter.

Iowa City, Iowa.

For the American Bee Journal.

Italian Bees in Australia.

S. McDONNELL.

As it may be interesting to the readers of the BEE JOURNAL to learn in how far my experiment to introduce Italian bees into this Colony has progressed, I send you a few notes on the subject.

The mail steamer "City of Sydney" left San Francisco on June 4, and arrived in Sydney harbor on the evening of the 1st inst. The mails by her were delivered here on the morning of the 2d inst., and by a letter from Mr. A. H. Newman I learned that, according to my instructions, two colonies of Italian bees had been shipped by the steamer. I next visited the ship's agents, who handed to me a letter from Mr. Williams, of Messrs. Williams, Dimond & Co., San Francisco. Mr. Williams, although a stranger to me, was kind enough to attend to the shipping of the bees at San Francisco, on their arrival from Chicago, and I am much indebted to him. The shipping documents contained in Mr. Williams' letter enabled me to get immediate possession of the 2 hives, and by means of a cab (traveling gently) and the suburban railway, by noon the bees were on their stands on my ground at "Homebush," about 8 miles from Sydney. The portico of each hive (Langstroth) contained about a quart of dead bees, which I had removed and preserved, in order to see if the queens were among the dead. I have looked them over (the dead bees) without finding her. The day was bright and warm and the bees were soon flying briskly. I now had an opportunity, for the first time, of seeing Italian bees, and I was much pleased to see that the difference between them and the black bees is sufficient to be noticed by such a fresh acquaintance to their appearance as myself. We have, so far, had a very mild winter, the days having been warm and clear and the nights cool, the thermometer on one or two occasions showing the mercury at freezing point.

You will observe that the bees left Chicago at the end of May, or about the middle of your spring, and arrived here on the 1st of July, or at the beginning of our winter. They, therefore, after having passed through an unusually severe winter with you, have been subjected to the long journey from Chicago to San Francisco, by rail, and a 4 weeks' sea voyage to Sydney. It is true that our winters seldom are so inclement as to prevent bees from flying all the time, but, nevertheless, I cannot but think that the best time for bees to arrive at Sydney from San Francisco would be October, in order to avoid the double winter. I was much exercised to decide whether

or no my new friends, the Italians, paid our climate the compliment of taking the mild winter to which they landed, as the summer which should, in ordinary course according to their calendar, have been allotted to them. I am afraid, though, that if they entertained such a notion, their minds have been disabused by the absence of flowers.

Having landed the bees safely, my next trouble was their proper care and maintenance, and I turned to the hand-books—including Langstroth, Cook, King, Quinby and Root, which I have on my shelves, for information. For the first time in applying to those books for assistance in a difficulty, and you will understand in how far I am indebted to them when you learn that I have none other than the advice to be gained from books and periodicals to guide me—no practical friend to give me a wrinkle at the proper moment, or show me how to avoid doing things as they ought not to be done—I sought without finding.

The points on which I more particularly sought for information were, 1st, The general treatment of bees after a 4 weeks' sea voyage; 2d, Their treatment in having to face a second winter, without the intermediate seasons. If you think it worth while to give a few hints on these points, they would probably be perused by others, as well as myself, with interest. Although they would come too late to be of service to me in my present emergency, they would be in good time should I try a second experiment. Under the circumstances I hold that a little food would not come amiss, and that an inspection of the hives, during fine weather, would do no harm, and would relieve my curiosity as to the bees rearing brood, as they would in the ordinary course of summer following winter and spring. Not having a tool handy to remove the frames without jarring, from the position in which they were fixed for traveling, I deferred the operation, and have since been prevented from inspecting on account of wet weather, during which I deemed it inadvisable to open the hives. I have, however, given them food in the shape of honey and syrup, to guard against their food combs being empty, although I had misgivings that by so doing I might be encouraging breeding at an unreasonable time of year.

You will thus see that the experiment of introducing Italian bees is fraught with difficulties, the more especially when undertaken by one whose only experience lies in having put the most excellent rules contained in your American hand-books and periodicals into practice. I feel like one wandering in the dark in unknown parts, to whom a little practical advice exactly to the point would be as welcome as the light of day. Should the experiment not succeed, I should not determine that it cannot be successfully performed, but should attribute the failure to my want of experience, and should try it again.

Your JOURNAL continues to be read with great interest. I must complement your artist on the excellent reproduction of your photograph, which appeared as a wood cut in your JOURNAL. The possession of the photograph kindly sent by Mr. A. H. Newman enables me to form an opinion of the reproduction. It is an additional proof that the matter in the JOURNAL is true to nature, and that its readers may rely on its counsel.

Sydney, Australia, July 12, 1881.

[When you placed the hives upon the stands you should have taken out the frames and examined them critically—1st, for the queen; 2d, to mend broken comb; 3d, to regulate feeding; 4th, to see the amount and condition of brood. If it is possible for frequent flights, we would advise stimulating for immediate breeding, as many of the bees are old, and the colony will soon dwindle if new bees are not reared to take the place of the old ones.—ED.]

For the American Bee Journal.

Value of the Cyprian Bees.

WM. M. ROGERS, D.D.S.

The evidence of the BEE JOURNAL against the character of the Cyprian bee appears to be cumulative, and I think the inference a pretty fair one that the editor's judgment begins to yield to the pressure. It would be presumption in me to attempt to instruct you, but pray permit me, in your columns, to advise those who are in the possession of pure Cyprians to be careful how they let a good thing slip their fingers. I have now had Cyprians from the Jones-Benton importation for about one year. I am sure that I do not, at this writing, find any cause for regret in the fact that I sacrificed a nice strain of Italians for them.

Hybrids, except in rare instances, are ranked as the most vicious and irritable bees, and we ought not, of course, to expect that Cyprians, when crossed, should be an exception. I think extreme crossness or "ferocity" (the word speaks the nervousness of the writer of it) in a colony of Cyprians, imported though it be, will, in itself, constitute a weighty argument for the impure mating of the queen.

My experience is to the effect that Cyprian queens mated with Italian drones give a progeny, in frequent cases, that is unbalanced from the character of either parent. I bred colonies in 1880 from Cyprian queens mated to Italian drones that carried, as far as I could see, all the characteristics assigned by Mr. Benton to the pure Cyprian, excepting, only, the case of their queen progeny. From the same stock I bred other colonies just as nice as the above, that I would pit against the continent as fighters, and yet I have not known a single instance in which even the worst of these have volunteered an attack.

I cannot but regard it as a matter of regret that Mr. Jones should leave Syrian bees with Mr. Benton on the Island of Cyprus. This, I think, is a fairly presumable fact. It is to be regretted in a less degree, only in the event that his sales from this source have been less, that Mr. Fiorini should have established his Cyprian apiary in the presence of Italians. We owe a debt to the past as well as to the future. The censured character that falls to the inheritance of the Cyprian, under thousands of years of isolation and trial, ought not, if valuable, to be thoughtlessly or recklessly lost; it seems a moral wrong to do so. From my observation I think the Cyprian has everything to lose and nothing to gain from crossing, whether with Syrians or Italians.

I shall not indorse the Cyprian for the full measure of gentleness that is exhibited by the Italian, but I do affirm that Mr. Benton's statements on this point are, to the letter, true, and I boldly assert that his affirmation is worth more than the denial of a thousand loose experimenters added to that of another thousand of careless observers. I shall advise no one to give up Italians for Cyprians, but to those who make the experiment or who have already invested, I say, if you are first sure of the purity of your stock and understand its character, you can write as your second proposition—success. Let the uninitiated know that the tests of purity, as applied to Italians, are not a test for Cyprians, for a Cyprian queen mated with an Italian drone will produce a race so closely resembling pure Cyprians that it will take more than ordinary powers of discrimination to distinguish the difference, and yet in character the bees are essentially different. Hence I infer that many breeders who sell untested Cyprians, having not the ghost of a chance for pure mating, will vend many bees that will stand the test of the 3 bands. What is the test of a pure Cyprian? I have not found it in the worker progeny, but I will not deny that a more acute observer might do so. I am almost sure that for the most of us it must be sought in the

worker and the queen progeny considered together in every case. As far as I have observed, the queen progeny of a mated mother will manifest the mating. If this be so it will never be a popular fact among breeders until buyers are willing to pay for what they get. Many of these untested Cyprians of 1881 and their mongrel progeny will appear at the bar as blatant witnesses and vociferous accusers of the pure Cyprian. Could any race of bees sustain character under the conditions likely to be engendered against this "noble bee?"

Shelbyville, Ky., Aug. 15, 1881.

[We want all the light possible regarding the Cyprian and Syrian bees. If they, or either of them, possess superior traits, why does not Dr. Rogers enumerate them? It is an admitted fact, that the progeny of an Italian queen mated with a black drone, are worse in disposition than the blacks; *per contra*, it is claimed that the progeny of a black queen mated with an Italian drone, are more amiable and vigorous. This will probably account for the frequent assertions that hybrids are the best workers. Again, is it not possible to combine the better traits of the Italians, Cyprians and Syrians, or a majority of them—if any are superior?—Ed.]

For the American Bee Journal.

Exhibiting Bees at Fairs.

J. M. BROOKS.

Having read the article on "Management of Bees at Fairs," I will say that, as I have had a little experience in that line, I am of the opinion that our efforts to instruct the public in this way will prove fruitless. Several years ago I obtained permission to exhibit some bees at our State Fair; in due time I arrived at the grounds and opened up my bees. The public were greatly interested and surprised to see how easily the combs could be handled, the queens found and shown them, and all without the use of smoke, veil, or gloves. Although the crowd continually surrounded the bees, not one received a sting. Everything seemed to be working nicely, when the superintendent came up; taking me to one side, he said that I would have to close up my hives, that they were not stinging anyone, but were giving the "candy stands" trouble. I explained the matter to him, that, as there was an apiary of blacks kept in the neighborhood it was very plain to be seen that as my bees were Italians he would find that about one of my bees to 50 of the blacks were causing the trouble. He admitted the fact, but said that the candy men would not be satisfied unless my bees were shut up. I confined them to the hives that evening after dark.

The next day I visited all the stands, and such a sight—pound after pound of stick candy lay on their counters, exposed not only to tempt the poor innocent bees to a feast, but to all the dirty flies, also. Bees were everywhere, completely driving away proprietor and customers, and taking everything before them. Of course, they never volunteered to sting anyone unless pinched, nevertheless their presence filled everybody with fear. Thousands perished at the "sweet cider" presses, and made things lively for the "hot-candy" men, who boil and serve their candy on the grounds. Of course all were free in laying the whole trouble to the "confounded bee man," in bringing bees on the grounds, when the truth was I had kept them closed up, except the one day.

Stepping up to a stand kept by a lady (where the bees were just swarming) I remarked that the bees were very troublesome, when she replied: "Yes; if it hadn't a been for that plagued bee man we shouldn't a had all this bother. The managers made

him take 'em off the grounds, and here he's went and left all these a flying around here; confound 'em, I wish they were all dead!"

I could not help smiling at the view she had of the matter, so explained that she was laboring under a mistake, that I was the bee man and had closed up my bees the evening before, and that those flying belonged to hives kept outside the grounds.

I had been to some trouble and expense in getting my bees on exhibition, and, although not to blame for the hundredth part of the trouble, yet I had to be ruled out in order to satisfy the confectioners. I attached no blame to the superintendent; he acted and reasoned in a gentlemanly manner, saying (as I fully understood) that they were ignorant of the cause of the trouble, and as long as they could see my hives open they would not be convinced but what every one of the bees belonged to my hives.

I would not discourage anyone from the undertaking, but will say unless there has been an understanding "all around" beforehand, that sweets and everything to tempt the bees must be kept under cover, there will be trouble.

As to persons getting stung, there need be little fear if the exhibitor knows his business; if he does not he had better leave the bees at home.

Columbus, Ind., Aug. 10, 1881.

[Mr. Brooks would now probably meet with more encouragement for his beautiful bees; and certainly nothing could be more interesting than a practical lecture from him in connection with his exhibition. Last fall, at the Wisconsin State Fair, a gentleman of Madison exhibited his bees, and explained the methods of manipulating them. This season, with a good yield, his extracted honey has been sold as fast as obtained at comb honey prices. This is what is wanted, and bees are of much more importance to the country than hot glucose candy.—Ed.]

For the American Bee Journal.

Preparing Bees for Winter.

L. J. DIEHL.

Now is the time to prepare colonies for safe wintering. First, see that each colony has a prolific queen, and if it has not already enough honey, be sure that the colony has enough bees to fill up for winter as soon as the fall bloom comes. Each comb should have at least one hole through it, for a winter passage, for the bees to pass from one comb to another, without passing around the frame. I have examined many a colony of bees that have been wintered in a careless way, that were not provided with winter passages, and have starved with plenty of honey on the other side of the comb. I feel certain that if they had had a passage through the comb they would have survived the winter. If any colonies fail to gather enough honey for winter, in the fall, unite all such together, for you can make one good colony out of 2 or 3 poor ones, and I often find colonies thus treated the very best colonies in the spring.

I early prepare my colonies for winter, on the summer stands. This is the critical point in wintering bees, and it must be done in good season so that the bees can properly finish up the work before the frost cuts off the bloom. I have read the published reports very carefully, and can account in no other way for the bad results of last winter but by the neglect to have the bees prepared in good time. They should have at least 2 or 3 weeks pleasant weather before winter sets in, to seal up and clean the hive; then, if properly packed inside the hive and kept dry, they will winter in good condition.

This is my plan for preparing bees for winter, and it works to a charm. After the fall season is over for surplus, I take a blanket made the size of

the hive on top, and long enough to reach down to the bottom of the frames, smoke the colony, take off the surplus arrangements, contract the colony to the proper size, put in division-boards, fill the empty space with dry chaff, or any dry absorbent that may be handy, such as rags, fine hay, or straw, place the blanket on the top of the frames, then drop the end of the blanket down back of the frames, tuck the edges in nicely, close up the hive and fill the top or upper story with an absorbent, cover the hive to keep perfectly dry. I bore a $\frac{1}{4}$ -inch hole in the front of hive, about $\frac{1}{2}$ of the way up from the entrance, front the hives to the south, and all is ready.

I have wintered my bees with success for at least 15 years, and I know whereof I speak. People are depending too much in chaff packing outside of the hive; they must have at least one end of the frames to run to the hive without packing, and that end should be the front, and the hive must front the south. All the bees that were in my town are dead, except mine, which wintered safely. I have 135 colonies, and my loss in winter was 6 colonies, 2 of which became queenless, 2 were destroyed by mice, one starved and one died with dysentery. This has been a very good season for honey. My bees have had no rest since the fruit bloom; there has been a constant flow of honey.

Butler, Ind., July 24, 1881.

For the American Bee Journal.

The Origin of Drones.

C. J. ROBINSON.

In a paper read before the Entomological Society, published on the first page of the BEE JOURNAL, of July 27, Prof. A. J. Cook wrote: "Though doubt is sometimes expressed as to the origin of drones by parthenogenesis, there is no such doubt among intelligent apiarists." If all intelligent apiarists agree on any certain point, why mention a doubt concerning the admitted fact, unless the writer thereof assumes to dispose of or settle the question of who rank as intelligent, and those who do not? Said writer was well aware that I, for one, "express doubt," yea, controvert the doctrine that teaches parthenogenesis in honey bees.

Mr. Cook, providing he is reliable authority on the subject he discussed, was aware that at least two intelligent apiarists, namely, the lamented Major Munn, a learned physiologist and enthusiastic apiarist, wrote thus: "Parthenogenesis, so far as the honey bee is concerned, would be difficult to prove with all the voluntary muscles in the bees' abdomen, or any pressure of the cells that might be brought to bear on the oviparous queen bee." He further says: "The proof is wanting that the eggs may not have already been fecundated in the queens' ovaries."

I claim, as set forth in a former article, that queens are impregnated with royal jelly (drone's semen) while in the larval state. Furthermore, I will here allude to one other enthusiastic and experienced apiarist who, though read out by Prof. Cook as not being counted "intelligent," advocated the same doctrine as to the "origin of drones" that I promulgated in the BEE JOURNAL of March 23. The individual referred to is Mr. Elihu Kirby, a naturalist of some sense, at least, if not intelligent according to the before mentioned standard. Prof. E. Kirby was a valued correspondent of the Albany Country Gentleman, and after the AMERICAN BEE JOURNAL was started, he contributed to both periodicals until his health failed. The reader can compare the articles of the said Professors and determine which, in a scientific point of view, "expresses" the highest degree of intelligence.

Inasmuch as I have presented testimony to corroborate my theory of the origin of drones, I challenge Prof. Cook to produce one intelligent apiar-

ist, not barring himself, who can explain and prove beyond a doubt, that drones originate by parthenogenesis. No intelligent scientist will confess that he, in matters pertaining to any science, pins his faith upon some one, or some few observations of his own, and say that others are non-intelligent who are not of the same faith.

The doctrine of parthenogenesis is of modern invention, being held forth as a hypothesis to account for the reproduction of certain insects, but there is no record of evidence showing that parthenogenesis exists, in fact, in any living creature, much less that it explains the phenomenon of virgin queens reproducing drones. Certain German scientists, namely, Von Siebold, Leuckart, and Dr. Donhoff are the originators of the term parthenogenesis, and defined its meaning. Those men fancied that drones originated as explained by their new theory, and the lamented Baron of Berlepsch, being in the dark regarding the phenomenon, adopted the hypothesis as a fact.

Either parthenogenesis is a false doctrine or the Creator had no wise purpose in making a distinction of sex. True, if we have faith in some stories, some of us might believe that parthenogenesis existed even in the human race, but none would be willing to vouch for the truth of those stories, even to uphold the doctrine by them advocated. Of course, I have no reference to the case of Joseph's betrothed, nor to the 15 other virgins who, according to ancient history, are reputed to have reproduced independent of the male sex!

Parthenogenesis and Mormonism may yet transform the relation of human males to the reproduction of our race, like the relation of the drone to the bee species. I hope that some Professor will deign to write an essay on this subject.

Richford, N. Y., Aug. 15, 1881.

For the American Bee Journal.

Bacteria, a Cause of Loss in Winter.

JAMES HEDDON.

In the BEE JOURNAL of June 15, Mr. J. O. Sherman wants to know why some scientific "beeist" does not give us the proof, if it is bacteria that kills our bees. First, the theory or supposition, and then the demonstration. How long did bacteria produce itch, diphtheria, etc., before the scientist guessed (from symptoms) the true cause, and then how long was it till he demonstrated the truth of the guess? Imagination is the parent of nearly all practical inventions and discoveries. I wish to say here, that thin honey is not the main great cause of dysentery, for often have I known colonies to die early, when apparently none but the best of stores were theirs. Again, I had my large apiary of 375 colonies nearly all winter safely, with considerable cider honey in each hive. We have many credible reports where bees all died, with none but sealed, thick honey; I have had colonies die with dysentery in its worst form, ere winter had fairly begun, where their honey was, apparently, first class.

Mr. Sherman says, "nearly all admit" that bees can endure long confinement if the honey is thick and in good condition. In nearly every repository, or out-of-doors, as soon as a colony is dead, dampness accumulates in the hive, an effect—not a cause—of the death of the bees. If the causes Mr. Sherman ascribes are the true ones, why is there such a difference in the success of apiaries only a few miles apart? Why cannot you go about in the fall and select the hives where the bees are going to die? I thought that the winter problem was still unsettled, not "admitted." This thin-honey theory came up, was advocated, and let drop, some years ago, as the BEE JOURNAL shows. We believed that dysentery had one cause; we knew that it raged in its worst form where no thin or sour honey was present. Of course we dropped this seeming cause.

Mr. Sherman further says, "assertions do not satisfy." Where does he find any assertions of mine as to what causes dysentery? I have, from the first, called the bacteria theory only a hypothesis, and said it was the only theory that would admit of all the effect we had experienced and heard reported. We had all heard of thin honey and fall honey as causes, and our experiences and observations had convinced us to the contrary. We knew bees had wintered in damp repositories, where "the combs were all moldy" (I quote Mr. Balch, of Kalamazoo), and died in dry ones, where all was dry and an even temperature existed; that they had come through in fine condition out-of-doors, during damp winters, where the combs molded badly, and had all died in some apiaries in seasons just the opposite; that some lived while others died, only a few miles apart, where the winter was the same, and honey in the same condition as far as thinness was concerned.

Dowagiac, Mich.

For the American Bee Journal.

Introducing Queens with Safety.

T. E. TURNER.

I write on introducing queens in 2 hours' time, for the benefit of those who purchase queens and are doubtful of successful introduction. When an apiarist has purchased a fine queen, at a cost of from \$2 to \$20, it is a matter of some interest to him to know how to introduce her to a colony with safety. Different writers have given their methods, and in works on the apiary we find several described; the one I have adopted as the safest and quickest is an old one with variations.

When your queen has arrived, which should be in warm weather if at all possible, take a frame of brood just hatching from each of a number of colonies, as you may choose to introduce your queen to a large or small colony, and place them in a new hive on a new stand. Get combs of brood and bees from colonies that have no queens, or that have virgin queens where there are no eggs, if possible.

Then let the bees in the new queenless colony stand 2 hours, with the entrance open, in the middle of the day when bees are working busily. When the old bees will have gone back to the colony from which they were taken, the cage or shipping box containing the queen may be opened and placed inside the hive prepared for her, with the edge of the box open against one of the combs, and she will leave the box or cage at her leisure, and go on the combs among the young bees unmolested.

If it is desired to make the introduction of your queen doubly sure, shake or brush off all the bees from each comb into or in front of the hive from which taken, and place the combs of brood alone in the new hive. Let them stand for 2 hours, when there will be quite a cluster of young bees hatched out, among which your valuable queen may be allowed to crawl unharmed.

This is the safest and quickest method that I have ever tried. The plan of caging a queen for 48 hours between combs or on a comb I have found to be unsafe and tedious. On one occasion I caged a valuable queen on a comb in a hive containing old bees for 48 hours, and released her to have her balled up and only saved her from being stung to death by a violent smoking and driving of the bees backwards and forwards through the hive. The 2 hour method may not be a success in the hands of some, in every case, but so far I have not failed with it in one instance, and I have introduced a number of queens in this way. I have had some failures in all other methods, but have never failed by this plan, and, all things considered, this 2 hour method appears to be the only positively safe way of introducing queens. It is only 2 hours and the time spent in preparing the hive, behind A. I. Root's plan of let-

ting queens run right into a queenless colony, and certainly it is 99 times the safest.

Sussex, Wis., Aug. 5, 1881.

CONVENTION NOTES

Convention in Nebraska.

A meeting of the Nebraska State Bee Keepers' Association will be held in Omaha, Friday night, Sept. 16, 1881, to consider wintering reports and the best method of wintering, and such other business as may demand their attention. T. S. VANDORN, Pres.

GEO. M. HAWLEY, Sec.

I append a copy of the premium list of our State Fair. A cordial invitation is extended to all to participate in the exhibit.

Best comb honey, not less than 20 pounds, crated, and in single-comb sections weighing not less than 2 pounds each, 1st premium, \$10; 2d premium, \$5.

Best gallon extracted honey, limited to competitors producing their own honey in Nebraska during the year 1881, 1st premium, \$5; 2d, \$3.

Best colony of Italian, Cyprian, or Syrian bees, or cross of either, 1st premium, \$10; 2d, \$5.

The test of colonies to be net gain in stores during the two weeks preceding the day of examination. Each hive to be weighed, recorded and sealed at the commencement and again at the end of the trial. No colony admitted not possessing the ordinary amiability of pure Italians.

Best exhibit of brood and surplus comb foundation fully or partly drawn out, \$5.

Best exhibit of apiarian implements and supplies, 1st premium, \$10; 2d, \$5.

Best display of honey in marketable shape, \$5.

G. M. HAWLEY.

Read before the S. W. Wis. Convention.

Essays, and their Advantages.

EDWIN FRANCE.

I find it difficult to get members of bee-keepers' societies to write essays for conventions. There is always some excuse—no time, not posted, no experience, some one else can do better, etc.

Let me ask, are bee-keepers' associations profitable, or likely to be? I think we can all profit by them if we do our part. We get together to talk over matters belonging to the bee business, and, as our time together is short, it is important that we come right to the point on everything, and we want to take up as many of the most important points as our time will admit. Now, I think it is important that every member have some point assigned to him, and let him post up and gather together all the evidence he can bearing on that point, and write it down to be read at the next meeting. Should it happen that he cannot come, he can send it to be read.

There is no member that will be so much benefitted by it as the one that writes the essay, because, if I write on any subject I have to think and post myself on it, and call to mind many things that I would not otherwise have thought of; I shall examine the bee-papers and think over my past experience in that direction. In that way I shall, perhaps, find many things to remind me of something that I ought to do, that will be a benefit to me. If we ever make the business a success we must think—we must study all the wants and habits of the bee. There are many things to be thought of, and I know of no way that will induce us to think on any subject as much as to write on it, and one is more likely to remember an idea if it is brought out by hard study, especially if written down. If we make bee-keepers' associations a success we

must work, think, talk and write. If there is anything we do not understand, that is the very point we should write upon, for, if we do ourselves justice, we will post up on that point. In fact, we want to post up on every point in the business.

Let no one try to excuse himself on the ground of inability. Some say: "I can't write anything; there are others that can do better, and if I do write, I am just as likely to say something wrong as right." If that is the case, by all means say it; say it before the meeting, for if you are wrong very likely some of the members can correct you, and put you on the right track. The sooner you are corrected, the better for you.

I want all to criticize me just as closely as they can. If I say something you do not understand, ask for an explanation, or, if you cannot agree with me, say so, and let us talk the matter over. Perhaps I am wrong; if so, I want to be corrected. We can learn a great deal from one another, in fact, we can learn a great deal from mistakes made in bee-keeping, as well as any other matter. I think we should establish a question box; that is, if anyone has questions to answer or be answered, let them write each question on a slip of paper and hand it to the Secretary to be read and answered by any member. If it will take too long to explain now, have it assigned to some one to answer at our next meeting.

As we can gain knowledge by observation, we should closely watch everything belonging to the bee business. If we lose a colony of bees try and find out why it was lost, make a record of it, and bring the report to the meeting and let us all know about it, so that we can be prepared to avoid a similar loss.

I often find, while working with bees, that I get an idea clearly demonstrated, and if I do not note it down it is soon forgotten and lost. Therefore, I think it would be a great help if everyone would write down and bring to the meeting such things as they may think of from time to time. Either in the way of questions or improvements, let no good idea be lost, for we need all the help we can get.

Platteville, Wis.

Bee-Keepers' Union.—The Eastern New York Bee-Keepers' Union Association, will hold their eighth semi-annual Convention on Tuesday, Sept. 27, 1881, at 10 a. m., at Knowersville, N. Y. All bee-keepers are invited to attend. W. D. WRIGHT, Pres.

N. D. WEST, Sec.

The Southern California District Bee-Keepers' Association will hold its annual meeting in Los Angeles City, Sept. 8, 9, and 10, 1881. All persons interested in bees and honey are respectfully invited to attend.

J. E. PLEASANTS, Pres.

Anaheim, Cal.

The Northwestern Bee-Keepers' Association will meet in Chicago, on Tuesday and Wednesday, October 25 and 26. All bee-keepers are cordially invited to attend. It is desired to make this one of the most interesting conventions ever held in the United States. C. C. MILLER, M. D., Pres.

C. C. COFFINBERRY, Sec.

The Eastern Michigan bee-keepers' Association will hold its fall meeting in Detroit, Oct. 4, in the Y. M. C. A. hall, at 10 o'clock a. m.

A. B. WEED, Sec.

The Southwestern Wisconsin Bee-Keepers' Association will hold its next meeting in Platteville, Grant Co., Wis., Nov. 30, 1881.

N. E. FRANCE, Sec., Platteville, Wis.

The Northwestern Illinois and Southwestern Wisconsin Bee-Keepers' Association will hold its next meeting Aug. 30, at Rock City, Stephenson Co., Ill.

JONATHAN STEWART, Sec.

SELECTIONS FROM OUR LETTER BOX

The Fall Honey Yield.—Bees are doing well here now; they are working on buckwheat. I received a good crop of clover honey, and I think we will of buckwheat and other fall flowers. I attribute my success to the JOURNAL and Cook's "Manual of the Apiary." Success to each.

A. RHINEHART.
Corning, N. Y., Aug. 15, 1881.

My Season's Report.—In the spring of 1880 I had 24 colonies of bees—blacks and hybrids. I obtained 2,000 pounds of comb honey and 800 pounds of extracted, and increased to 45. In October they were packed in chaff on their summer stands. On March 1 all were alive except 2 that starved, and nearly all were apparently strong and in good condition. As they were nearly out of stores, I opened the hives frequently and gave them honey and sugar candy over the frames. This disturbance, combined with the long, cold spring, caused them to dwindle, and only 15 colonies survived; 11 colonies swarmed out, abandoning brood in all stages, 2 leaving as late as the middle of May, when they were apparently prosperous. The queens in these colonies were given to strong ones that were queenless. I lost 10 queens in 4 colonies; they would lay a few days and then disappear. Out of 50 colonies in box hives, unprotected, belonging to different families, there are 6 alive. Mr. Stanton, of Sheridan, had 56 colonies last fall; 20 were in the winter hive; of these only one died; 36 were in single-walled hives, with chaff in the caps; of these only 15 lived, and they were very weak. The bees in the winter hive did not dwindle. I had one chaff hive, but that one did not have a pint of bees. I like those hives; they have all the capacity for side-storing or extracting that can be desired, or the side spaces can be used for queen-rearing, and storing given above, and they are the nearest approach to a non-swarmer of anything I have seen. One man at Ionia, 14 miles from here, had 22 colonies, packed the same as in the winter hive, and he only lost 2, and they came through in good condition. I purchased 10 of these colonies, and have now 57. I have 2 natural swarms that have gathered 80 pounds each of comb honey; I have 600 pounds of comb honey (clover and basswood), and the same of extracted. The bees are getting honey now from buckwheat. A few weeks ago, as I was cutting out queen-cells, one hatched in my hand. I caged her and placed the cage in a nucleus; in 2 days I released her; she crawled onto a comb and immediately attacked a worker bee and stung it to death; in a few days she was laying. What a diversity of opinion there is on the subject of bee-keeping. I wonder why it is that men who are equals in intelligence, ability, experience and success, should differ so much in regard to the successful management of the apiary! In the face of all these conflicting theories the beginner has to use his own judgment, and learn by experience.

Mrs. A. M. SANDERS.
Sheridan, Mich., Aug. 12, 1880.

[Men differ on every conceivable subject—on science, politics and religion just as much as on theoretical bee-keeping—though they are "equals in intelligence, ability, experience and success."—Ed.]

Irresponsible Supply Dealers.—I am out \$10 for attempting to deal with irresponsible parties, besides the loss sustained by not having the section boxes ordered early, until late in the season. I think that when dealers prove unreliable or dishonest they should be exposed, so that others need not suffer loss by dealing with them. Bees are doing finely here now on

white clover; it was getting dry, but we have had a fine shower which will give clover another start. Success to the Weekly BEE JOURNAL. It is supplying a need long felt by apiarists, and when changed to the new form for next year, it will be better than ever.

S. H. MALLORY.
Decatur, Mich.

Milkweed.—I send a bee with what appears to me a fungus growth upon its neck and the lower part of its legs. I find the workers of their own hive dragging a number of them out. This is taking place among other bees besides my own. This is among the black bees exclusively. I have Palestine and Italian bees, but it does not occur among them. I have put them under a 1-5 power glass of my microscope, but cannot tell what it is.

I. R. GAST, M. D.
Millflintburg, Pa., Aug. 10, 1881.

[The bee sent was weighted down with pollen masses of the milkweed (*Asclepius*).—A. J. COOK.]

Ants.—To drive ants from bee hives take a handful of tansy leaves and rub and scatter them about the part infested, and the ants will leave. Try it. If you have none growing plant some near the bee yard, to have it handy.

J. M. VALENTINE.
Carlinville, Ill.

Dry Weather and no Honey.—Bees are not doing very well; the weather is dry and I have no surplus up to this time. I put on top story and sections with foundation starters about a month ago, but the bees do not seem to take to it.

C. W. FISHER.
Lewis, Iowa, Aug. 9, 1881.

The Basswood Yield.—Basswood has come and gone; for 2 years before this the yield of honey from it has been very light, and this year was no exception to what is getting to be the rule, in this section; but perhaps the fact that a steam mill within one mile of my place is sawing it into lumber, at the rate of 500,000 feet per year, has something to do with the yield of it. Bees are now doing the best I ever saw them, at this time of the year, from the second crop of white clover. They hardly pay any attention to buckwheat, although there is plenty near.

N. F. CASE.
Glensdale, N. Y., Aug. 9, 1881.

[The axe has more to do with it than many think. We must plant for honey or get none, after a short time.—Ed.]

Well Done.—My bees have done well this season. I commenced with 16 colonies in the spring and transferred 9 of them from the box hive into the Jones hive, and increased to 32. I bought 3 colonies, making 35 on hand now, and I have taken about 2,200 pounds of honey since the spring, mostly extracted. We had a good season for honey.

W. G. RUSSELL.
Millbrook, Ont., Aug. 15, 1881.

Honey-Dew.—I would like to ask through the BEE JOURNAL, where does honey-dew come from? My bees were quite busy this spring on an oak tree that stands close by my shop. Some say it comes from a little insect; others, that it is dew which falls on the tree, but this oak tree stands under a big sycamore tree, and not a particle of the dew was on the sycamore tree, while the oak swarmed with bees every day for weeks, and other trees close by had none of the dew on them. I think it is the overflow of sap from the tree.

JOHN BOERSTLER.
Gilead, Ill., Aug. 13, 1881.

[The origin of honey-dew is a question of doubt among scientists. Some hold that it is an excrement emitted by Aphides, a small species of insect; others claim that it is the exudation of sap through the surface pores of the leaves.—Ed.]

Large Bee Hives.—I bought my first colony of bees in a hive 12x12 and 10 inches deep. Of course I made all of my hives of that size, until I became tired of it. I made different styles of hives and frames after that, and this spring I made one 18 inches from front to rear, 20 inches from side to side, 9 $\frac{1}{2}$ inches deep, and 2 stories high. In this hive I put a good colony that wintered on 3 Langstroth frames; the spaces between the combs were $\frac{3}{4}$ inches, and they contained sealed honey from top to bottom. Those frames were not only covered with bees, but crowded, and were wintered in a cellar. I never thought that a good colony of bees could be put on 3 combs, but it can be done. Bees never rear brood when crowded like that; but by giving them the whole hive and combs, bringing the honey from the outside combs to the center, they will rear brood and get uneasy. I was induced to make this large hive by Mr. Langstroth's article in *Gleanings*, in which he said a hive 18 inches from front to rear, and 18 inches from side to side, gave the best results. My hive is 20 inches from side to side and takes 28 frames, 14 below and 14 in the upper story. The queen in this hive had 10 combs well filled with brood all the time, until I took one of brood away and gave it to a nucleus; then she kept 9 full. I tried to make her lay in another frame, so as to have 10 again, but she would not do it. This colony did not swarm, and gave the best results I ever had. I shall make all my hives of that size for the coming year. I have a number of queens that will be 2 years of age next June; they have been good layers all summer, and I thought of getting young queens in their place—will they be as good next spring as they were this spring?

WM. FRITZE.
Duluth, Minn., Aug. 14, 1881.

[As your queens will be but 2 years old next June, they should be good yet; good, robust queens are thought to be better the second season than the first.—Ed.]

Suitable Size for Nuclei.—In reply to Samuel Coulthard I would say that I do not claim to be an extensive queen-breeder, although I have been rearing queens, more or less, for the past 12 years. I prefer making nuclei boxes to suit the frames of the hive I use. I would make them large enough to hold 2 or 3 frames; if the nuclei is to contain but one frame, the remaining space can be filled with 1 or 2 division-boards, as the case may be, and then it is an easy matter to add a frame of unsealed brood, as such is sometimes necessary. A full-sized hive answers as well for nuclei, only they cost more. In making boxes for nuclei I allow 17-16 inches for each frame. I have taken the BEE JOURNAL for a number of years, and must say that I am well pleased with the change from Monthly to Weekly. I could not well do without it. JAMES P. STERRITT.
Sheakleyville, Pa., Aug. 12, 1881.

All Dried Up.—Bees did very well here the first part of the season, until the present excessive drouth commenced. We still have no rain—pasture and all kinds of flowers are completely dried up. We can only get our bees through by heavily feeding.

J. B. R. SHERRICK.
Mt. Zion, Ill., Aug. 17, 1881.

Melilot or Sweet Clover.—I bought some of this because you recommended it so highly as a honey producer. I sowed early in the spring, on a rich wheat field, as a test I before sowed a little with spider plant; that sowed with spider plant has grown from 2 to 6 feet high, and bloomed finely. On one stalk from one seed, branching out in every direction like a peach tree, I counted 31 blossoms, and this present great drouth does not affect it, while everything else is dead, and bees are starving. I wish I had put 2 acres of this in good rich soil, and

tilled it well. I think it would have been \$200 to me this summer. The question is, what is Bokhara clover? is it an annual? if so, I have lost all my seed and labor sowing with wheat. My wheat was planted on very dry land. Spider plant done moderately well. The drouth has killed a part of the alsike clover; I had one acre, sowed last year; in the early summer it was literally covered with bees all day. Success to the BEE JOURNAL.

ASBURY MCKNIGHT.
Bible Grove, Ill., Aug. 13, 1881.

[Bokhara, melilot and sweet clover are virtually one and the same; at least we can see no difference. It is a biennial, and that planted with the wheat is not lost.—Ed.]

Large Crop of Honey in New York.—The yield of honey in this section is very good. The largest yield of extracted honey for a single colony I have known here has been 306 pounds. My largest (the largest I have weighed but I think equalled or excelled by 1 or 2 others) has been 218 pounds, with about 30 pounds of buckwheat still to extract.

C. M. BEAN.
McGrawville, N. Y., Aug. 10, 1881.

Rearing Pure Queens.—Please give, through the BEE JOURNAL, the best way to rear pure Italian queens, from a pure queen, among a hundred colonies of black bees? I have a very fine queen I received, a year ago, of A. H. Newman; she is the finest I ever saw. Her progeny is perfect. I have some red clover queens, from a queen purchased of A. I. Root, but they breed all colors from a light colored Italian to a black; they work on red clover in preference to white clover or anything else, except basswood (which amounts to nothing here this season) and goldenrod. My bees done splendidly early in the season, but since July 1 all they have done is breeding, which has been immense. It is favorable for a good crop from this on. I shall endeavor to rear pure queens next season, and want the best way, under the circumstances. The JOURNAL would be welcome daily, or as it is.

A. J. NORRIS.
Cedar Falls, Iowa, Aug. 18, 1881.

[It is of no use to try to rear pure Italian queens among 100 colonies of native bees. By removing the colony of pure bees to some remote part of the farm you may accomplish it.—Ed.]

Foul Brood Again.—There is no doubt that boiling hives, frames, etc., is a sure cure for foul brood, for I have the authority of Mr. J. S. Harbison, who, when at Sacramento, was troubled so much that he made a tank to boil his hives in. If we could heat the wax to the same point there would be none of the foul brood germs left in it, but it is almost impossible to do it. I render all of mine under glass in my honey tank, at about 150° or 160°, and could melt my wax and make foundation in the summer time, never using fire heat, if I wanted to; so, for one, I do not want any foundation made from foul brood wax.

S. S. BUTLER, M. D.
Los Gatos, Cal., Aug. 10, 1881.

[We doubt whether any insect life could withstand, for any considerable time, the amount of heat necessary to transform comb into foundation; nor would contagious influences. What Dr. Butler might do without fire heat, is not the method pursued by foundation manufacturers; they find a much greater amount of heat necessary to do expeditious work.—Ed.]

The Northern Michigan Beekeepers' Association will hold its fourth Annual Convention at Maple Rapids, Clinton Co., Mich., Oct. 11 and 12, 1881. O. R. GOODNO, Sec.

SPECIAL NOTICES.

Single copies of the JOURNAL sent postage paid for 5 cents each.

Those who may wish to change from other editions to the Weekly, can do so by paying the difference.

Advertisements intended for the BEE JOURNAL must reach this office by Saturday of the previous week.

Ribbon Badges, for bee-keepers, on which are printed a large bee in gold, we send for 10 cts. each, or \$8 per 100.

Articles for publication must be written on a separate piece of paper from items of business.

Photographs of prominent Apiarists—Langstroth, Dzierzon, and the Baron of Berlepsch.—Price 25 cents each.

When changing a postoffice address, mention the old as well as the new address.

Constitutions and By-Laws for local Associations \$2.00 per 100. The name of the Association printed in the blanks for 50 cents extra.

The Beauty and Color of the hair may be safely regained by using Parker's Hair Balsam, which is much admired for its perfume, cleanliness, and dandruff eradicating properties. 31w4

Nearly all the ills that afflict mankind can be prevented and cured by keeping the stomach, liver and kidneys in perfect working order. There is no medicine known that will do this as quickly and surely, without interfering with your duties, as Parker's Ginger Tonic. See advertisement. 31w4

A Sample Copy of the Weekly BEE JOURNAL will be sent free to any person. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office.

Examine the Date following your name on the wrapper label of this paper; it indicates the time to which you have paid. Always send money by postal order, registered letter, or by draft on Chicago or New York. Drafts on other cities, or local checks, are not taken by the banks in this city except at a discount of 25 cents, to pay expense of collecting them.

Premiums.—For a club of 2, weekly we give a copy of "Bees and Honey;" for a club of 5, weekly, we will give a Cook's Manual, a Bee-Keeper's Guide, bound in cloth; for a club of 6, we give a copy of the JOURNAL for a year free. It will pay to devote a few hours to the BEE JOURNAL.

It would save us much trouble, if all would be particular to give their post office address and name, when writing to this office. We have letters (some inclosing money) that have no name, post-office, County or State.—Also, if you live near one postoffice and get your mail at another, be sure to give the address we have on our list.

Premiums.—Those who get up clubs for the Weekly BEE JOURNAL for 1882, will be entitled to the following premiums:

For a Club of 2, a copy of "Bees and Honey."
" 3, an Emerson Binder for 1882.
" 4, Cook's (See) Manual, paper, cloth.
" 5, Weekly Bee Journal for 1 year.

We have a SPECIAL EDITION of the Weekly BEE JOURNAL, just as it will be published in 1882 (16 pages), for distribution at Fairs, Conventions, etc. Any one who may desire to distribute them to bee-keepers will be supplied free, in any quantity they may be able to judiciously use.

Honey and Beeswax Market.

BUYERS' QUOTATIONS.

CHICAGO.

HONEY—New honey is coming in freely and the demand is good.
We quote light comb honey, in single comb boxes, 18¢20¢; in larger boxes 2c. less. Extracted 7¢8¢.
BEESWAX—Prime quality, 18¢20¢.
A. L. H. NEWMAN, 972 W. Madison St. Chicago, Aug. 20, 1881.

NEW YORK.

HONEY—There is no settled market price yet for honey, as there is none here.
We quote as follows: White comb, in small boxes, 15¢18¢; dark, in small boxes, 12¢15¢. Extracted, white, 10¢12¢; dark, 7¢9¢.
BEESWAX—Prime quality, 22¢24¢.
THORN & Co., 11 and 13 Devos avenue. New York, Aug. 18, 1881.

CINCINNATI.

HONEY.—Last week I paid King Cramer 17¢ per lb. for a lot of about 2,000 lbs. It was in the Muth sections, 54x8, without separators. Every comb is perfect, which speaks well for the producer. If Mr. Cramer did not succeed, this season, in establishing rates for queen fertilization, he succeeded admirably in getting one of the finest lots of comb honey in the country. Extracted honey is just commencing to be in good demand.
I quote: Good comb honey, in sections, is worth 14¢16¢, on arrival. Extracted, 7¢9¢, on arrival.
BEESWAX—18¢22¢, on arrival. I have paid 25¢ per lb. for choice lots. C. F. MUTH, Cincinnati, Aug. 13, 1881.

ST. LOUIS.

HONEY—At present the market is prostrated; there is no activity whatever. Aside from a sale on Monday of 13 bbls. old Louisiana at 54¢, nothing reported. We quote: New, strained, 7¢8¢; extracted, in cans, 9¢10¢; comb, 12¢13¢; old is nominal.
BEESWAX—Prime yellow sells at 21¢.
R. C. GREER & Co., 117 N. Main Street. St. Louis, Mo., Aug. 18, 1881.

BOSTON.

HONEY—The prices of honey are not regularly quoted in our papers here. We quote: Honey in 1 pound sections retails at 25¢; in 2 pound sections, 20¢.
BEESWAX—Prime quality, 25¢.
CROCKER & BLAKE, 37 Chatham Street, Boston, Mass., Aug. 17, 1881.

CLEVELAND.

HONEY—Comb honey, in unglazed sections, is in extraordinary demand. 18¢20¢ for 1 lb. white and 18¢19¢ for 2 lb. sections. Extracted honey is not so lively, but salable at 10¢12¢ per lb. in 30 to 50 lb. cans.
BEESWAX—10¢25¢.
A. C. KENDAL, 115 Ontario Street. Cleveland, O., Aug. 18, 1881.

SAN FRANCISCO.

HONEY—An invoice of 267 cases and 7 bbls. was forwarded this week to Liverpool, shipped by a packing firm. The market is quiet, but holders are not disposed to shade rates.
We quote white comb, 16¢18¢; dark to go, d. 11¢13¢. Extracted, choice to extra white, 9¢10¢; dark and candied, 7¢8¢. BEESWAX—23¢25¢.
STEARNS & SMITH, 423 Front Street. San Francisco, Cal., Aug. 13, 1881.

Local Convention Directory.

1881.
Time and Place of Meeting.
Sept. 27—Eastern N. Y. Union, Knowersville, N. Y.
N. D. West, Sec. Middleburg, N. Y.
Oct. 4—Eastern Michigan, at Detroit, Mich.
A. B. Weed, sec., Detroit, Mich.
6—Union Kentucky, at Shelbyville, Ky.
G. W. Demaree, Sec., Christiansburg, Ky.
5-7—National, at Lexington, Ky.
Dr. E. Farmlly, Sec., New York City.
12—Kentucky State, at Louisville, Ky.
11, 12—Northern Michigan, at Maple Rapids.
O. B. Goodno, Sec., Carson City, Mich.
11, 12—Northeastern Wis., at Pewaukee, Wis.
Frances Dunham, Sec., DePere, Wis.
12—Central Ky., in Exp. B'dg., Louisville, Ky.
W. Williamson, Sec., Lexington, Ky.
25, 26—Northwestern District, at Chicago, Ill.
C. C. Coffinberry, Sec., Chicago, Ill.
27—Central Michigan, at Lansing, Mich.
George W. Perry, Sec.
27—Western Mich., at Berlin, Mich.
Wm. M. S. Dodge, Sec., Coopersville, Mich.
Nov. 30—S. W. Wisconsin, at Plattville, Wis.
N. E. France, Sec., Plattville, Wis.
1882.
Jan. 10—Cortland Union, at Cortland, N. Y.
C. M. Bean, Sec., Mcrawville, N. Y.
25—Northeastern, at Utica, N. Y.
Geo. W. House, Sec., Fayetteville, N. Y.
April 11—Eastern Michigan, at Detroit, Mich.
A. B. Weed, Sec., Detroit, Mich.
27—Texas State, at McKinney, Texas.
Wm. R. Howard, Sec.
May—Champlain Valley, at Bristol, Vt.
T. Brookings, Sec.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

CLUBBING LIST.

We supply the Weekly American Bee Journal and any of the following periodicals, for 1881, at the prices quoted in the last column of figures. The first column gives the regular price of both:

Publisher's Price.	Club.
The Weekly Bee Journal (T.G. Newman)	\$2.00
and Gleanings in Bee-Culture (A.L. Root)	2.75
Bee-Keepers' Magazine (A.J. King)	3.00
Bee-Keepers' Exchange (J.H. Neill)	2.75
The 4 above-named papers	4.75
Bee-Keepers' Instructor (W. Thomas)	2.50
Bee-Keepers' Guide (A.G. Hill)	2.50
Kansas Bee-Keeper	2.50
The 7 above-named papers	6.00
Prof. Cook's Manual (bound in cloth)	3.25
Bee-Culture (T.G. Newman)	3.40
Binder for Weekly, 1881	3.50
For Semi-monthly Bee Journal, \$1.00 less.	
For Monthly Bee Journal, \$1.50 less.	

TIN PAILS FOR HONEY.

These Pails have a full cover, and are excellent for marketing Canded Honey. The gallon and half gallon pails have a bail or handle, the quarts and pints have none.
Assorted samples of the four sizes, put inside one another as a nest, price 50 cents. These pails are very useful for many other purposes, after being emptied of the honey by consumers. The following are the prices:

	Per Doz.	Per 100
Gallon, holding 10 lbs. of honey	\$1.80	\$12.00
Half Gallon, " "	1.50	9.00
Quart, " "	1.20	7.00
Pint, " "	.75	4.00

ALFRED H. NEWMAN,

972 West Madison Street, Chicago, Ill.

EMERSON BINDERS.



15 Binders for the Weekly Bee Journal, of 1881, cloth and paper, postpaid, 85 cents.

We can furnish Emerson's Binders, gilt lettered on the back, for AMERICAN BEE JOURNAL for 1880, at the following prices, postage paid:
Cloth and paper, each.....50c.
Leather and cloth.....75c.

We can also furnish the Binder for any Paper or Magazine desired.

THOMAS G. NEWMAN,

974 West Madison Street, Chicago, Ill.

Floreston Cologne

The Most Fragrant and Lasting of all Perfumes. New & Fashionable. Sold by dealers in Drugs & Perfumery. Signature of Hiscox & Co., N. Y., on every bottle.

PARKER'S GINGER TONIC

If you are wasting away with Consumption, Languor or any weakness, you will find Parker's Ginger Tonic the greatest Blood Purifier and the Best Hair & Strength Restorer you can use and far superior to Bitters and other Tonics, as it builds up the system, but never intoxicates. 50 ct. and \$1 sizes. Hiscox & Co., Chemists, N. Y.

PARKER'S HAIR BALSAM

Remove Dandruff. Prevents Baldness. Restores Color.

ELECTROTYPES

Of Engravings used in the Bee Journal for sale at 25 cents per page, no single cut sold for less than 50¢.
THOMAS G. NEWMAN,
974 West Madison Street, Chicago, Ill.

GOLD MEDAL Awarded the Author. A new and great Medical Work, warranted the best and cheapest, indispensable to every man, entitled "The Science of Life, or Self-Preservation," bound in finest French muslin, embossed, full gilt, 300 pp., contains beautiful steel engravings, 125 prescriptions, price only \$1.25 sent by mail; illustrated same, 6c; send now. Address: Feabody Medical Institute or Dr. W. H. PARKER, No. 4 Bulfinch St., Boston. 22w1y

ESTIMATES

Given for ADVERTISING in any NEWSPAPER in the Country. Our new Price List for Advertisers SENT FREE.
C. A. COOK & CO., Advertising Agents, Cor. Dearborn & Wash'n Sts., CHICAGO.

American Bee Journal

VOLUME FOR 1880,

Bound in paper covers. A few copies for sale at \$1.00, postpaid to any address.

THOMAS G. NEWMAN,

974 West Madison Street, Chicago, Ill.

65 ENGRAVINGS

The Horse

BY B. J. KENDALL, M. D.

A TREATISE giving an index of diseases, and the symptoms; cause and treatment of each, a table giving all the principal drugs used for the horse, with the ordinary dose, effects and antidote when a poison is taken with an engraving of the horse's teeth at different ages, with rules for telling the age of the horse; a valuable collection of recipes, and much valuable information.
Price 25 cents.—Sent on receipt of price, by Address.

THOMAS G. NEWMAN,

974 West Madison Street, CHICAGO, ILL.

The Bee-Keeper's Guide;

or,
MANUAL OF THE APIARY,

By A. J. COOK,

Of Lansing, Professor of Entomology in the State Agricultural College of Michigan.

320 Pages; 133 Fine Illustrations.

This is a new edition of Prof. Cook's Manual of the Apiary, enlarged and elegantly illustrated. The first edition of 3,000 copies was exhausted in about 18 months—a sale unprecedented in the annals of bee-culture. This new work has been produced with great care, patient study and persistent research. It comprises a full delineation of the anatomy and physiology of the honey bee, illustrated with many costly wood engravings—the products of the Honey Bee; the races of bees; full descriptions of honey-producing plants, trees, shrubs, etc., splendidly illustrated—and last, though not least, detailed instructions for the various manipulations necessary in the apiary.

This work is a masterly production, and one that no bee-keeper, however limited his means, can afford to do without. It is fully "up with the times" on every conceivable subject that can interest the apiarist. It is not only instructive, but intensely interesting and thoroughly practical.

Read the following opinions of the Book:

All agree that it is the work of a master and of real value.—*L'Apiculteur*, Paris.
I think Cook's Manual is the best of our American works.—LEWIS T. COLBY.

It appears to have cut the ground from under future book-makers.—*British Bee Journal*.

Prof. Cook's valuable Manual has been my constant guide in my operations and successful management of the apiary.—J. F. WEST.

I have derived more practical knowledge from Prof. Cook's New Manual of the Apiary than from any other book.—E. H. WYNKOOP.

This book is just what everyone interested in bees ought to have, and which, no one who obtains it, will ever regret having purchased.—*Mich. Far.*
Is a masterly production, and one that no bee-keeper, however limited his means, can afford to do without.—*Nebraska Farmer*.

To all who wish to engage in bee-culture, a manual is a necessity. Prof. Cook's Manual is an exhaustive work.—*Herald*, Monticello, Ill.

With Cook's Manual I am more than pleased. It is fully up with the times in every particular. The rich reward awaits its author.—A. E. WENZEL.
My success has been so great as to almost astonish myself, and much of it is due to the clear, disinterested information contained in Cook's Manual.—WM. VAN ANTWERP, M. D.

It is the latest book on the bee, and treats of both the bee and hives, with their implements. It is of value to all bee-keepers.—*Ky. Live Stock*.

It is a credit to the author as well the publisher. I have never yet met with a work, either French or foreign, which I like so much.—*L'ABBE DU BOIS*, editor of the *Bulletin D'Apiculture*, France.

It not only gives the natural history of these industrious insects, but also a thorough, practical, and clear expressed series of directions for their management; also a botanical description of honey producing plants, and an extended account of the enemies of bees.—*Democrat*, Pulaski, N. Y.

We have perused with great pleasure this rare manual of the bee-keeper. It is replete with the best information on everything belonging to apiculture. To all taking an interest in this subject, we say, obtain this valuable work, read it carefully and practice as advised.—*Agriculturist*, Quebec.

This book is pronounced by the press and leading bee-men to be the most complete and practical treatise on bee-culture in Europe or America; a scientific work on modern bee management that every experienced bee-man will welcome, and it is essential to every amateur in bee-culture. It is handsomely printed, neatly bound, and is a credit to the West.—*Western Agriculturist*.

This work is undoubtedly the most complete manual for the instruction of bee-keepers which has ever been published. It gives a full explanation regarding the care and management of the apiary. There is no subject relating to the culture of bees left untouched, and in the compilation of the work Prof. Cook has had the advantage of all the previous knowledge of apiarists, who are so admirably to promote and make popular this most interesting of all occupations.—*American Inventor*.

It may safely be pronounced the most complete and comprehensive of the several manuals which have recently appeared on the subject of bees and their handling in apiaries. The studies of the structure of the bee, the different varieties, the various bee products, and following these the points of management, extending to the smallest details, are all of high and practical value. Prof. Cook has presented the latest phases of progressive bee-keeping, and writes of the themes discussed in the light of his own experience.—*Pacific Rural*.

Of the many excellent works which we have examined on bee-culture, we consider Prof. Cook's the most valuable for the study of those who contemplate going into the business or are already keeping bees. If thoroughly studied, and its teachings conformable to, by the apiarist, who exercises a reasonable degree of common sense, he or she cannot fail to achieve at least a reasonable degree of success. The author addresses himself to the work with a degree of enthusiasm which carries the reader with him to the end.—*Kansas Farmer*.

Cook's Manual of the Apiary holds in America the same high rank, that is accorded in Germany to the book of which Dzierzon is the author; the only difference being that Prof. Cook's Manual combines the profoundness of the German pastor with the superiority of the practical American. He refers in several instances to Darwin; and does not belong to that class which hates everything that is foreign, for he speaks of German naturalists with great reverence.—*German Freidenker*, Milwaukee, Wis.

—Jot—

PRICE—Bound in cloth, \$1.25; in paper cover, \$1.00, by mail prepaid. Published by

THOMAS G. NEWMAN,

974 West Madison Street, CHICAGO, ILL.

Books for Bee-Keepers.

The work contains 1,016 pages, is a veritable Treasury of Useful Knowledge, and worth its weight in gold to any Mechanic, Business Man, Farmer. Price, postage paid, \$2.50.